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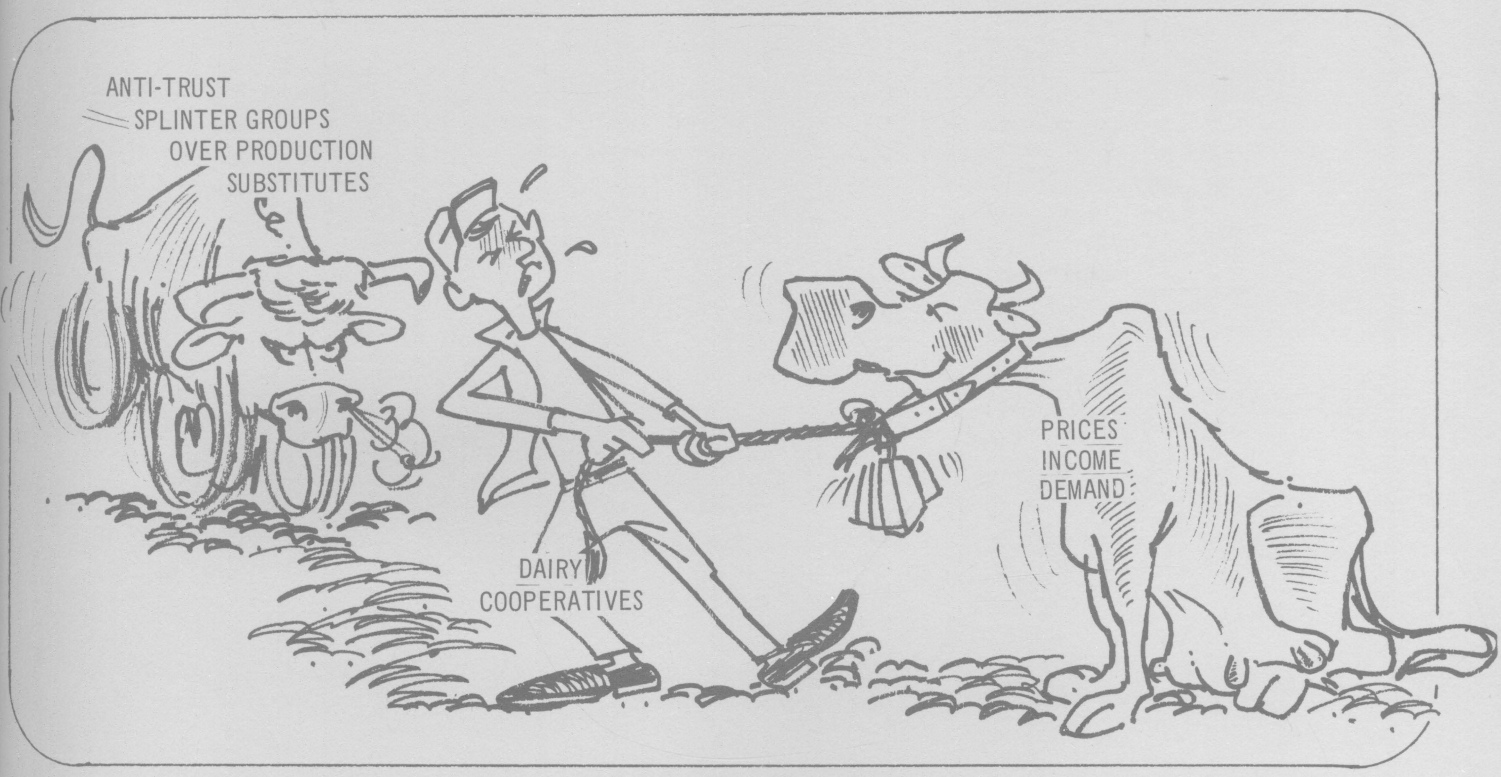

PROCEEDINGS OF A SEMINAR ON

FUTURE ISSUES IN MILK MARKETING

COOPERATIVE EXTENSION SERVICE
THE OHIO STATE UNIVERSITY

DECEMBER, 1971

FOREWORD

Presentations included in this proceedings represent most of the formal part of the program of the sixth Ohio Dairy Seminar, held September 16-17, 1971. This seminar has been sponsored jointly by the Ohio Milk Producers Federation and the Ohio Farm Bureau Federation, in cooperation with the Department of Agricultural Economics and Rural Sociology, The Ohio State University.

The seminar has two basic objectives:

1. To develop fuller communications between the Ohio Milk Producers Federation and the Ohio Farm Bureau Federation on the policy-marketing issues confronting the dairy industry.

2. To analyze and discuss the major priority problem areas in the dairy industry that producer organizations must contend with.

Future issues in the milk market were emphasized in this seminar, including legal problems in milk price bargaining, new advertising-promotion programs, impact of Grade B milk conversion on Grade A pricing, Class I base plan potentials, and component pricing of milk.

The Planning Committee for this sixth seminar in the series included Sam Cashman and William McNutt, Ohio Farm Bureau Federation; Glen Wagner, Robert Brewer, Paul Stebbins, Norman Alger, and Donald Zehr, Ohio Milk Producers Federation; and Robert Jacobson, The Ohio State University.

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IMPLICATIONS OF GRADE B CONVERSION IN WISCONSIN-MINNESOTA TO MILK PRICING-POOLING IN OHIO

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Deputy Director, Dairy Division
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It is a pleasure to be with you today.

The subject "Implications of Grade B Conversion in Wisconsin-Minnesota to Milk Pricing-Pooling in Ohio" is a lively one. In a nutshell, here are the implications as I see them.

-- Newly qualified supplies of Grade A milk in the upper Midwest are going to put pressure on milk prices in Ohio and other markets throughout the country.

-- New concepts of market sharing and of sharing the burden of surplus supplies must be developed.

-- Significant changes in the milk order and other Government dairy programs may be required.

Conversion to Grade A is nearly complete in most parts of the country. Nationwide, 74 percent of all milk marketed -- 81 billion pounds -- is Grade A. Presently, 19 States are 100 percent Grade A and another 11 States are 90 percent or more Grade A. Ohio is 89 percent Grade A. The other 26 percent of the milk marketed is manufacturing grade milk or Grade B. It is concentrated in a few areas. Over 50 percent of the remaining Grade B milk is in the two States of Minnesota and Wisconsin. Over 8 billion pounds in Wisconsin and 6.5 pillion pounds in Minnesota. Another 10 percent of the Grade B -- over 3 billion pounds -- is in Iowa.

The producers of this milk are rapidly converting to Grade A or getting out of the dairy business. It is reported that about 65 percent of the Grade B milk in Wisconsin is handled in farm bulk tanks and that 55 percent of the Grade B in Minnesota is bulk. This part of the Grade B supply could go Grade A with little additional investment on the part of producers.

The economic and other pressures to go Grade A, I think, are irreversible. It seems inevitable that producers who shift from B to A are going to desire to share in the proceeds of the fluid market along with other Grade A shippers. And existing Grade A producers will naturally resist the flooding of their markets and dilution of the blend price they are receiving.

If Grade B milk which is converting to Grade A were more evenly distributed geographically relative to Class I markets, the problem would be less difficult. Instead though, it is concentrated in a few areas; primarily, Minnesota, Wisconsin, and Iowa.

Producers in Wisconsin and Minnesota as they convert to Grade A have been associating large quantities of milk with the Chicago, Twin Cities, and other Minnesota Federal order pools.

Class I utilization for the Chicago market was 45 percent last year. The Twin Cities market had a 43 percent Class I utilization. Southeastern Minnesota-Northern Iowa market had a 44 percent Class I utilization and the Minnesota-North Dakota market had a 30 percent Class I utilization last year. This year Class I utilization in these markets is running 3 to 4 percentage points lower than a year ago. Blend prices in those markets are depressed and producers in these markets feel that they bear a disproportionate share of surplus Grade A milk.

In addition to putting extreme pressures on the Chicago and Twin Cities markets, the producers of these supplies of Grade A milk through their cooperatives have increasingly sought Grade A outlets in other markets in the central part of the country, including Ohio to a limited extent. This newly qualified Grade A milk puts pressure on marketing arrangements and prices in most parts of the country. As more milk converts to Grade A these pressures will increase, particularly, if the buildup in milk supplies nationally continues.

How fast this milk will convert to Grade A no one knows. Some experts estimate that virtually all Grade B shippers in Minnesota and Wisconsin who are going to continue in dairying will have converted in a period of 5-10 years.

A major problem to be faced is how to incorporate these additional supplies of Grade A milk into the marketing system in an orderly manner. Who should share in the proceeds of the fluid market and in what manner are the 64 dollar questions.

In trying to answer the question of who shares in the Class I price and how you divide it, let's go back to some basic concepts of milk pricing. Many years ago, we had a number of well defined markets with a rather well defined supply area. The appropriate Class I price was considered to be one which would attract a sufficient supply of Grade A milk to meet fluid requirements of the market plus necessary seasonal and daily reserves. The question of who should share in the fluid proceeds of a market could be answered in rather straightforward economic terms. A supply area encircling a market could be described which represented essentially the area where producers whose milk was needed for this well defined market were located. They were the ones entitled to share in the Class I proceeds.

With the growth of larger cooperative organizations and development of marketwide pooling, the concept of what producers were entitled to share in the Class I proceeds became less clear.

Even at the time Federal orders were put in the large Northeast markets such as New York and Boston, the philosophy had developed that essentially all Grade A producers in the Northeast should be permitted to share in some fluid milk pool.

The expansion of distribution areas and freer movement of milk have led to numerous market area expansions and mergers. In spite of the large number of order mergers, our marketing area definitions still fail to keep pace with developments in the organization of milk supplies on the one hand and in distribution patterns on the other. Market boundaries are harder and harder to define and potential supply areas keep growing. These developments have made more complex the question of what producers are entitled to share in the proceeds of the fluid market. They also have made more difficult the application of the supply-demand pricing standard in the Marketing Agreement Act.

The difficulties in applying the adequate supply concept in a narrow sense comes into clear focus when you consider its continued application to markets such as Chicago and Twin Cities which are surrounded by a sea of Grade A milk.

The concept must be translated into terms of adequate supply for broad regions, and in the final analysis for the Nation. I think it is within this framework that pricing and pooling schemes must be developed in the future--and by pooling schemes I mean both methods for equitable sharing in the higher valued Class I proceeds on the one hand and equitable sharing in the burden of surplus on the other.

I think it is going to be necessary to work toward a concept where all fluid milk producers would share in the proceeds of the fluid market. I say this because, I think, some time in the not too distant future, we will have essentially a national market for fluid milk.

If substantial additional supplies of milk are to share in Class I proceeds the blend price of existing Grade A producers would be reduced unless Class I prices were increased to offset the price depressing effect of these additional supplies. Good adjustment of supplies to demand, and obtaining as much as the market will bear for milk used in manufactured dairy products, will influence the extent to which additional proceeds would have to be obtained from consumers of fluid milk in order to develop an adequate level of blend prices.

However, we know that the demand picture for fluid milk is not strong and per capita sales are declining. The development of fluid milk substitutes also may influence the extent to which fluid milk prices can be raised.

Having set forth my ideas as to the market concept of the future, I'd like to talk a little about how we might get to that point from where we are now.

The transition has been going on for some time. In many areas all milk is Grade A and is incorporated in Federal order pools. Our orders have been expanded and merged to accommodate additional supplies of Grade A milk.

The voluntary standby pool is another device now in operation which I view as a transition to the type of program which I believe will eventually evolve. The scope of the standby pool has been expanded and further opportunities for expansion exist.

The present pay-in rate as I understand it is 2 1/4 cents and the pay-out rate is in the neighborhood of 33 cents per hundredweight.

Presently, the pay-in is being made on about 40 percent of the total Class I milk in Federal order pools excluding the West Coast. The pay-out covers roughly 1.1 billion pounds of Grade A milk in Minnesota-Wisconsin. This is less than 6 percent of the potential additional Grade A supply which exists in Iowa, Minnesota, and Wisconsin. I am estimating this potential additional Grade A supply at 17 billion pounds. If the pay-in was limited to just the present quantities of Class I milk on which the pay-in is made, it would require a pay-in rate of about 35 cents per hundredweight in order to maintain the present pay-out rate on 17 billion pounds of milk (the estimated quantity of manufacturing grade milk in Minnesota, Wisconsin, and Iowa) assuming it all eventually went Grade A.

If the pay-in were to be made on all Class I milk in Federal order markets excluding those on the West Coast the pay-in base would be increased from 16 billion pounds to 39 billion pounds. Thus the pay-in rate required to payout 33 cents per hundredweight on 17 billion pounds of milk would be about 14.5 cents.

Since conversion is going to take place gradually the increase in pay-in would be gradual.

I look forward to additional mergers of order markets into larger regional orders. The development of large regional cooperatives is a step which will facilitate merger of existing orders into large regional orders at such time as cooperatives feel this is desirable.

Large regional orders would accommodate the absorption of some additional Grade A supplies without unduly depressing blend prices.

A basic problem in the regional approach, as I see it, is that a central U.S. regional pool would have to absorb a disproportionate quantity of surplus milk relative to other regions as Grade B producers in Wisconsin, Minnesota, and Iowa convert to Grade A.

This is why I think that any program for providing a means for all Grade A producers to share in Class I proceeds would have to be very broad in scope.

In order to gauge in a rough way the potential impact of pooling all milk which converts to Grade A, I have just assumed all manufacturing milk will go Grade A and then estimated the effect of these additional supplies of milk on the all-market federal order blend price.

Of course, some manufacturing shippers are going to go out of dairying and not convert. On the other hand, many existing Grade A shippers and some who convert to A are going to expand their operations. So for simplification let's just add to existing Federal order receipts all of the manufacturing grade milk. Also to make this a little more realistic let's exclude the West Coast and, for simplification, not realism, not include the States in the Southeast which still have State programs.

Last year we had Federal order receipts excluding West Coast markets of 63 billion pounds and Class I sales of 39 billion. The all-market Class I utilization was 62 percent and the all-market blend was $5.95. Last year manufacturing milk marketings were about 27.5 billion pounds excluding about 2 billion pounds marketed on the West Coast.

If we were to add this 27.5 billion pounds to total Federal order receipts (again excluding the Northwest) we would have had an all-market Class I utilization of 43 percent, compared to the 62 percent which actually existed; and a blend price of $5.55 compared to the all-market blend of $5.95 which existed. So all of this manufacturing grade milk if it were to be pooled would take 40 cents off the all-market blend.

Of course, this 40 cents would not be distributed equally among markets. It is merely a rough indication of the overall impact of pooling this much additional milk.

You probably have noticed that I have said much more about what the problem is than the specifics of how to deal with it.

In order to develop thinking on the specifics of how to deal with this very complex problem of working of additional supplies of milk into the marketing system, the Department has entered into a research contract with Ohio State University and the University of Wisconsin.

Bob Jacobson and Dave Hahn from Ohio State and Truman Graf from Wisconsin will be the project leaders.

They plan to look at alternative means of dealing with the problem including:

1. Expanding the standby pool and possibly setting it up as a marketing agreement.

2. Regional orders.

3. Several types of national orders including one similar to that outlined by Charles Farr and a plan which would provide for transfer of funds from order pools to other order pools.

4. Types of cooperative operated plans including one along the lines of the so-called Self Help Plan originally developed by John Brandt.

Different types of pricing and pooling arrangements will be an important aspect of their work. They will also consider the need for supply management in dealing with this problem.

Issues, such as sharing of Class I proceeds and surplus, take on a much different complexion if looked upon in terms of the milk market that is emerging rather than in traditional terms of local markets. This does not mean that approaching problems in broader terms eliminates them. It does mean that the type of problem many times is of a different character--and that the solution to the problem may be vastly different if approached from a broad perspective rather than a narrow one.

SHOULD OHIO DO ANYTHING ABOUT A CLASS I BASE PLAN?

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In a setting where the demand for milk is dropping and production continues to climb, the possibility of a weakening of producer prices has initiated an increased interest in Class I base plans under federal milk marketing orders. In the Chicago Order marketing area, for example, the volume of milk utilized for Class I purposes was 35 percent in June -- 39 percent in July.

As a starter in answering the question, "Should Ohio Do Anything About A Class I Base Plan?", my comments will be restricted to three general areas:

1. What is a Class I base plan;
2. What are the basic mechanics of a Class I base plan; and
3. Some observations for consideration.

What Is A Class I Base Plan?

If we were to conduct a survey asking, "What is a Class I base plan?"-- the responses would vary extensively. Many responses would be conditioned by definitions dating back to the 1900's; some responses would confuse seasonal base plans with a Class I base plan; other responses would be based on an experience with a cooperative or a state order plan; and a few responses might relate to a Class I base plan as was authorized under the Food and Agriculture Act of 1965. Notably absent probably would be a description of a base plan as is authorized by the Agricultural Act of 1970 -- the current framework under which a Class I base plan must be developed for adoption under a federal milk marketing order.

To put more sharply into focus what a Class I base plan is, and is not, the following summary may be helpful. A Class I base plan:

1. Has as its primary objective the reducing of surplus milk production. This objective is based on the assumption that it is unprofitable for most dairymen in fluid markets to produce milk for manufacturing purposes.

2. Apportions fluid milk sales among the dairymen shipping to a particular market on the basis of each dairyman's past deliveries to that market.

   Historically, most base plans have been "seasonal" plans designed to solve the short-run problem of annual seasonal variations in milk production. Frequently confused with the Class I base plan, seasonal plans are designed to

achieve an improved supply-demand balance throughout the year by reducing seasonal variations in milk production, rather than to give each producer a fixed share of the Class I market.

3. Provides that milk delivered by a dairyman shall be divided into two categories: "base" milk and "excess" milk.

4. Provides that a producer shall receive a higher price for base milk, as compared to excess milk -- the lowest use classification. The base price, however, is not the Class I price. Largely because of the reserve requirement in a federal milk marketing order, the base price is lower than the Class I price.

5. Limits the amount of base milk a dairyman can market; however, no limitation is placed on the volume of excess milk that can be marketed.

6. Does not eliminate the classification system of pricing milk, nor change the method of determining handler payments for milk. The handler must account by classes for the milk used and must pay into the pool a sum equal to the volume used in each class times the respective class price.

7. Does not add to or subtract from the total money paid producers from the pool for a given quantity of milk. The money is merely divided among dairymen in a different manner.

   A study by the Market Administrator for the Puget Sound Federal Milk Marketing Order shows that for the period reviewed, 51 percent of the producers received a higher average price under the Class I base plan than they would have received on the basis of the uniform blend price; 49 percent received a lower average price.

   What the Class I base plan boils down to for the individual producer is a determination of which group he thinks he will be in.

As was previously alluded, a Class I base plan implemented under a federal milk marketing order must conform to the authorizing legislation contained in the Agricultural Act of 1970 -- not the Food and Agriculture Act of 1965. This point is emphasized because many within the dairy industry assume that the 1970 authorizing legislation is similar to the legislation enacted in 1965. There are significant differences -- it is a new ball game with a new set of rules. It would be an over-simplification, but for the purpose of helping to eliminate prior concepts as to how a base plan might have operated under a federal order, it can be said that about all the 1965 and 1970 authorizing legislation have in common is the title.

As an aid in answering the question "Should Ohio Do Anything About A Class I Base Plan?", the attached analysis -- A Comparison Of The Authorizing Legislation Contained In The Food And Agriculture Act of 1965 And The

Agricultural Act of 1970 With Comments -- includes most of the major provisions stipulated in the two Acts.

Some Of The Basic Mechanics Of A Class I Base Plan

In reviewing some of the basic mechanics of a Class I base plan, probably it is a natural to refer to the Class I base plan under the Puget Sound, Washington, Federal Milk Marketing Order No. 125.

Being the only plan that was implemented under the 1965 authorizing legislation and the only plan to date that has been implemented under the 1970 authorizing legislation, the Puget Sound plan should provide a pattern for many of the provisions that might be considered in a Class I base plan proposal in Ohio.

Production History Base

Under the Puget Sound Class I base plan, effective July 1, 1971, each producer who had been on the market three or more years established a "production history base" from his milk deliveries during a representative period -- the four months of lowest daily production in 1968, 1969, and 1970

Example:

Representative Period	Average Daily Deliveries (Pounds)
1968 (Jan-Feb-Nov-Dec)	1,662
1969 (Jan-Feb-Mar-Nov)	1,753
1970 (Jan-Feb-Mar-Nov)	1,969
	5,384

5,384 ÷ 3 = 1,795 pounds (Producer's "production history base")

A dairyman, however, who had continued on the market as a producer since the effective date of the previous plan was provided the higher of two options -- the "production history base" assigned to him under the prior plan or a "production history base" as computed above.

A plan must also contain provisions for establishing a "production history base" for producers shipping to the market for certain periods of less than three years (one year and two years) and for new producers.

Updating Production History Base

The 1970 Act requires that a producer's "production history base" be up-dated annually. Under the Puget Sound plan, such bases will be up-dated on February 1 of each year.

In addition to adjustments to a producer's present "production history base" for transfers, underdeliveries, etc., updating on February 1, 1972 will also take account of the producer's average daily deliveries of milk in the new production history period (four months of lowest daily production in 1969, 1970, 1971). If, for example, a producer's deliveries had increased over the level from which his previous Class I base had been computed, then this increased level would be credited toward an increase in the producer's "production history base."

Class I Base Percentage

An adjustment factor (Class I base percentage), determined by dividing the total of production history bases into the average daily Class I usage during the previous year plus the federal order reserve requirement (20 percent for the Puget Sound Order), is used to determine the base to be issued to each producer. For the Puget Sound market, the Class I base percentage was 65.209 percent.

Issued Base

To determine the base to be issued to each producer, the producer's "production history base" is multiplied by the Class I base percentage.

Example:

Producer's "production history base" --- 1,795 pounds
Class I base percentage --- .65209

Issued Base --- 1,170 pounds

A plan must also provide for allocation of Class I bases to producers with a production history of less than three years (one year and two years), to producers who were not issued a "production history base" on the effective date of the plan, and to new producers within 90 days after they begin delivery at the price for the lowest use classification.

Under the Puget Sound plan, producers who were not issued a "production history base" on the effective date of the new plan and producers who become associated with the market after July 1, 1971 are allocated Class I base determined by multiplying their deliveries by a predetermined percentage (Table 1).

Table 1. Percentage of Deliveries For Determining Class I Base, Puget Sound, Washington Marketing Area

Month	Producers Shipping Prior to July 1, 1971	Producers Shipping after July 1, 1971
	Percent	Percent
July, 1971	23	-
August	23	-
September	24	-
October	25	20
November	25	20
December	25	20
January, 1972	27	21

Source: Marketing Service Information For The Puget Sound, Washington Marketing Area, Federal Order No. 125, Market Administrator, July, 1971.

The percentages shown in Table 1 were computed as follows:

1. The ratio of the average daily producer milk deliveries in the market's four low months of the preceding year to the average daily milk deliveries in each month was determined (July -- 88.138%).

2. The above percentage was multiplied by 40 percent and by the Class I base percentage (88.138% x 40% x 65.209% - 23%).

3. The percentage applicable to producers starting after July 1, 1971 was reduced by 20 percent (January, 1972 -- 27% x 80% = 21%). The 1970 Act stipulates that such bases shall for a period of not more than three years be reduced by not more than 20 percent.

The Puget Sound plan also provides that new producers can establish a production history and earn a full base over a three year period.

Updating Class I Base

Unlike the 1965 authorizing legislation, the 1970 authorizing legislation provides for an "open" base plan with annual updating of a producer's Class I base to reflect changes in Class I sales and "production history base."

Under the Puget Sound plan authorized by the 1965 Act, a producer's base (issued base) was frozen at the level determined when the plan was established. A base not subject to change is a "closed base" -- the only way producers can obtain base is by purchase. An "open" base provides for a change in a producer's base on an annual, or some other predetermined period.

Base Transfers

Base transfers under the present Puget Sound plan have been tightened considerably from those in the previous plan.

The 1970 authorizing legislation provides for the transfer of bases among producers and authorizes the Secretary of Agriculture to establish "terms and conditions... which will prevent bases taking on an unreasonable value."

Under the Puget Sound plan, except for intrafamily transactions, when a producer sells any Class I base the "production history base" associated with the amount of Class I base sold is transferred, however, one-third of the Class I base and the associated "production history base" lapses.

Example:

Producers' Class I base	---	1,170 pounds
Producer's "production history base"	---	1,795 pounds
Class I base sold	---	500 pounds

"Production history base" associated with Class I base sale
(1,795 x 500 ÷ 1,170) = 767 pounds

Amount transferred to buyer	---	333 pounds of Class I base 511 pounds of "production history base"
Amount lapsed	---	167 pounds of Class I base 256 pounds of "production history base"

To discourage producers from selling their bases and earning new bases, the Puget Sound plan provides that producers who sell their entire base but continue to sell milk will receive the lowest use classification price until the later of the following dates: (1) the first day of the seventh month after transferring their base or (2) the first day of the third month from resumption of deliveries. At that time, such producers will be treated as new producers for base allocation.

Base "Blend" Price

Under the Puget Sound plan, about 85 percent (annual basis) of the base price is determined by the Class I price. The price a dairyman receives for his base milk, therefore, is more accurately expressed as the base "blend" price; the blend price derived primarily from the volume of base milk used in Class I and Class III times the respective class prices (Table 2).

Table 2. Base Milk Sales and Prices; Puget Sound Marketing Area, 3.5 Percent Milk, June, 1971

Sales of base milk used as Class I	---	79.83%
Sales of base milk used as Class III	---	20.17%
Class I	---	$6.62
Class II 1/	---	5.01
Class III	---	4.76
Base	---	6.33
Excess	---	4.76
Weighted average for all milk in market	---	5.48

1/ Class II price is 25 cents per cwt. above the Class III price. The 25 cents is distributed to producers through the excess location adjustment; does not affect the base price.

Translating base and excess prices into prices by classification, a dairyman with an average daily delivery of 2,400 pounds and a base of 1,170 pounds for the month shown in Table 2 would have received the Class I price for 934 pounds (39 percent of his total deliveries) and the Class III price for 1,466 pounds.

Weighted Average Price

The weighted average price is determined from the percentages the base and the excess milk are of the total producer deliveries times the respective base and excess prices. For example, in June, 1971 producer

deliveries in the Puget Sound marketing area were comprised of 47.21 percent base milk and 52.79 percent excess. The weighted average price for all milk in June was $5.48 (Table 2).

A dairyman who delivered a daily average of 2,400 pounds of milk in June (1,170 pound base) received the base price for 49 percent of his deliveries; the excess price for 51 percent. His weighted average price was computed as follows:

Base price	---	$6.33 x .49 =	$ 3.10
Excess price	---	$4.76 x .51 =	$ 2.43
Weighted average price	---		$ 5.53

Note that in the above example, this dairyman received a weighted average price for his milk in June that was five cents per hundredweight above the average for the total market (Table 2).

Some Observations For Consideration

Assuming that the primary objective of a Class I base plan is to effectuate a reduction in surplus milk production -- or stated in another way, to provide machinery for producers in a marketing area to adjust their production to the Class I utilization of the market -- it would appear that any consideration of a Class I base plan in Ohio should include an appraisal of the Puget Sound experience.

In a capsule, surplus milk production has not been brought under control in the Puget Sound marketing area.

1. Producer deliveries did decline (2.3 percent) the first year of the base plan, as compared to deliveries the year prior to the plan but deliveries have been above those for the previous year since that time (Table 3). Plant changes had only a slight effect on these figures.

2. For the ten month period (September, 1970 - June, 1971) producer deliveries were seven percent above those for the comparable period in 1969-70 -- this compares to about a one percent increase during the same period for the U.S. -- and producer deliveries the fourth year of the base plan (September, 1970 - August, 1971) will exceed those for the first year by at least 15 percent.

3. The Class I utilization in the Puget Sound market averaged 47.4 percent of producer deliveries in the year preceding the base plan; 50.6 percent the first year; 51.9 percent the second year; 49.0 percent the third year (Table 3); and 46 percent for the ten month period September, 1970 - June 1971.

Table 3. Producer Milk Deliveries and Class I Utilization, Puget Sound Marketing Area: September-August 1966-67, 1968-69 and 1969-70

Period	Deliveries	Class I Utilization
	Mil. Lbs.	Percent
1966-67 (year prior to Class I base plan)	1,286	47.4
1967-68 (1st year)	1,256	50.6
1968-69 (2nd year)	1.265	51.9
1969-70 (3rd year)	1,344	49.0

In the context of reducing surplus milk production, one requirement of a Class I base plan is the prevention of base erosion or a race-for-base; a second requirement is an "excess" price that is not high enough to induce production for manufacturing purposes. These provisions are fundamental and probably can be accomplished in various ways.

Base Erosion

The Agricultural Act of 1970 authorizes a period for determining a producer's initial "production history base" and an adjustment in the production base that reflects the utilization of producer milk in a particular use clsssification. In other words, deliveries during a specified period are related to the Class I disposition of pool milk for the determination of issued base. This is fine. However, it is at this juncture that the Act ceases technically to be an authorization for a Class I base plan. Some reasons for this abrupt conclusion are:

1. The Act provides that a producer's base will be updated annually. USDA has interpreted the Act to mean (and probably rightly so according to the language in the Act) that updating will reflect changes in Class I sales and a producer's "production history base" -- not just Class I sales; and

2. A plan that permits producers to increase their Class I base annually by expanding production will eventually be eroded.

If Ohio producers should desire a tighter plan than the present authorizing legislation permits, they may want to examine various proposals for restraining base erosion including:

1. Provision for initial determination of a producer's "production history base" and an adjustment to the production base that reflects the utilization of Class I sales. (Same as the 1970 Act);

2. Provision for the allocation of base to new producers, hardship cases, and producers coming under an order because of a plant change. (Same as the 1970 Act); and

3. Provision for annual updating of Class I bases to reflect changes in Class I sales and adjustments to a producer's "production history base" for transfers, hardship, under-delivery and inequity. (Would require a change in the interpretation of the 1970 Act; possibly new legislation.)

These provisions would provide new producers access to market and to base; base resulting from an increase or decrease in Class I sales would be shared by producers on a pro rata basis; and, except for minor adjustments, a producer's Class I base could be increased only if Class I sales increased or by the purchase of additional base.

This approach may be too restrictive for some producers. However, if dairymen are to avoid a situation where they must produce increasing quantities of milk for the lowest classification use to protect their share of income from Class I sales, a Class I base plan must:

1. Incorporate a "closed" base; or

2. Limit the "ownership" of base (to a cooperative where feasible), or

3. Relate the allocation of base strictly to Class I sales.

Excess Price

With or without a Class I base plan, price will continue to play the predominant role in balancing a market's needs. As one producer advocate of the Puget Sound plan remarked: "If the excess price is at a level where a producer can break even or make a few cents, the surplus in this market will not be greatly reduced." (This statement was made in 1968.)

In June, 1971 daily deliveries per producer averaged 7.1 percent over a year ago; Class I utilization was 37.7 percent of producer deliveries; and producers without base (who accounted for one-fourth of producer deliveries) received the excess price for 96 percent of their deliveries.

With the excess price being largely determined by the price support level, the support level is high enough to induce production of excess milk, or overbase milk, and has been largely responsible for undermining the Puget Sound Class I base plan.

The major cooperative in the Puget Sound market recognizes this problem and is currently exploring ways to make the plan more effective.

One proposal would establish a cooperative base plan on top of the federal order plan -- a producer's base would be his highest month's production during the past three years; a producer would receive $3.00 per hundredweight for deliveries in excess of his base; and the difference between the $3.00 and the manufacturing price would be added to the producer's price for base milk.

Other suggestions for Ohio producers to consider might include altering the price support level and a "third" federal order price.

In summary, any Ohio producer who is serious about a Class I base plan under a federal milk marketing order to reduce surplus milk production must give thought to the prevention of base erosion and to an excess price that discourages the production of such milk in large volumes.

CLASS I BASE PLAN

A Comparison Of The Authorizing Legislation Contained In The Food And Agriculture Act of 1965 And The Agricultural Act of 1970 With Comments

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
Class I Base Authorization		
Authorized bases for producers and associations of producers	Authorizes bases for producers only	The Act of 1965 permitted a cooperative with its own base plan to maintain the same relationship among its members as to their bases if a Class I base plan were approved under a Federal milk marketing order. The Act of 1970 contains authority for only individual producer bases.
History of Production		
The period for determing a producer's history of production base need not be limited to one year.	The period for determining a producer's history of production base shall be a period of one to three years.	Under the Act of 1965, the period for determining a producer's history of production base could be a selected period (four months for example) with the highest production during the current year or during the current year and the preceding one or two years. The Act of 1970 stipulates that the period shall not be less than one year or more than three years. (USDA has interpreted this language to mean that all 12 months of the preceding years need not be used for determining a producer's history of production.)

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
	Updating Base	
No provision for updating a producer's base.	Provides that a producer's base will be automatically updated each year.	Under the Puget Sound plan (authorized by the Act of 1965), a producer's base (issued base) is frozen at the level determined when the plan was established. The interpretation by USDA is that a producer's history of production base will be updated each year. Annual updating of base could take at least four forms - last year's base replacing the previous year's; the highest for the three year period; the average for the three year period; and the three year average or the base made in the current year, whichever is smaller.
	Underdeliveries	
If a producer holding a base shall reduce his marketings, such reduction shall not adversely affect his history of production for the determination of future bases.	If a producer holding a base shall reduce his marketings, such reduction shall not adversely affect his history of production for the determination of future bases or future updating of bases, except that an order may provide that if a producer reduces his marketings below his base, the amount of any such reduction shall be taken into account in determining future bases, or future updating of bases.	Under the Puget Sound Plan, a producer does not lose any base if he fails to deliver his entire base in any one month. The Act of 1970 contains a "may" provision for penalizing a producer who delivers less milk than his base allocation.

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
Transfer of Base		
Bases may by transferable if the Secretary determines transferability to be in the best interest of the public, existing producers, and prospective new producers.	Bases may be transferable on such terms and conditions including those which will prevent bases taking on an unreasonable value, as are prescribed in the order by the Secretary.	The Puget Sound Plan authorizes the transfer of bases among producers at the going market price. The 1970 Act, authorizing the Secretary of Agriculture to establish "terms and conditions...which will prevent bases taking on an unreasonable value," injects a judgment factor that might lead to under-the-table dealings if the Secretary should attempt to limit the price of base to less than its economic value.
Allocation of Bases		
No provision for the allocation of bases.	Provisions shall be made in the order for the allocation of bases.	Unlike the base plan legislation authorized by the Act of 1965, the Act of 1970 stipulates that provisions shall be made in the order for the allocation of bases to five categories of producers. It would appear that any base plan developed under the Act of 1970, would have to contain authority for reducing producer bases if additional base should be needed to comply with the Act.
Hardships		
Any increase in Class I base from increased consumption and forfeited bases shall first be made available to new producers and to the alleviation of hardship and inequity among producers.	Provision shall be made for allocation of bases for the alleviation of hardship and inequity among producers.	Under the Act of 1965, base for the alleviation of hardship could come only from base resulting from an increase in Class I sales and forfeited bases. The Act of 1970 stipulates that base shall be allocated for the alleviation of hardship - regardless of the level of Class I sales.

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
	New Producers	
Any increase in Class I base from increased consumption and forfeited bases shall first be made available to new producers and to the alleviation of hardship and inequity among producers.	New producers are defined as dairy farmers not delivering milk as producers under the order upon becoming producers under the order who did not produce milk during any part of the history of production period. Within 90 days after beginning delivery at the price for the lowest use classification, new producers shall be allocated base as determined proper by the Secretary. Such base shall for a period of not more than three years be reduced by not more than 20 percent.	Under the Puget Sound Plan, any increase in Class I base is assigned to "new" Producers (and hardship cases) for pricing purposes only - producers with base do not share in any increase in Class I base. If there was no increase in Class I base, no base would be assigned to new producers. Unlike the Act of 1965, the Act of 1970 defines new producers and stipulates that base shall be allocated (not assigned) to new producers within 90 days after beginning delivery at the price for the lowest use classification - regardless of the level of Class I sales. The Act of 1970 would appear to permit the Secretary to provide that any increase in Class I base from increased sales be shared by all producers on a pro-rata basis. The provision of the Act of 1970 stipulating that a new producer's allocated base shall be reduced can be interpreted to mean that a new producer's allocated base will automatically be reduced by one to 20 percent for a period of one month to three years.

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
	Plant Changes	
No provision for providing bases to producers coming under an order because of a plant change.	Producers coming under an order with a Class I base plan because of a plant change shall be provided bases determined on their past deliveries on the same basis as producers under the order.	The provision in the Act of 1970 for providing bases to producers coming under an order because of a plant change is the same as the provision in the Puget Sound Plan.
	Reentry of Producers	
No provision for reentry of producers who have previously discontinued their dairy or transferred their base.	An order may include provisions in regard to the reentry of producers who have previously discontinued their dairy or transferred their base.	Under the Puget Sound Plan, producers who sold their dairy have been free to reenter at any time as a "new" producer or by buying base and producers who sold their base have been free to continue delivering milk. The provision in the Act of 1970 might be interpreted to mean, for example, that a producer who had sold his dairy must be off the market for a stipulated period before being eligible for reentry as a new producer and that a producer who had sold his base but not his dairy must sell his milk at the excess price for a stipulated period before being eligible to buy base, or receive an allocation as a new producer.

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
	Other Producers	
No provision for the allocation of base to other producers.	Dairymen not delivering milk as producers under an order, upon becoming producers under the order, shall within 90 days be allocated base on the same basis as producers under the order. Such bases shall be allocated only to a producer marketing milk from the production facilities from which he marketed milk during the history of production period, except the allocation of base shall not exceed the amount of milk actually delivered under the order.	Known as the "Zwach" (Congressman from Minnesota) amendment, this provision of the Act of 1970 provides, in effect, that a producer after shipping to any Federal order market with a Class I base plan for 90 days at the excess price shall be issued base determined from his history of production on the same basis as producers under the order.
	Other Source Milk	
No provision for the assignment of other source milk to various use classes.	The assignment of other source milk to the various use classes shall be made without regard to whether an order has a Class I base plan.	The language in the Act of 1970 is interpreted to mean that Federal order markets with a Class I base plan can not down-allocate (change from Class I to Class II or III) packaged or bulk milk received from other order plants.

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
Antidumping Provision		
Provision may be made for reducing the allocation or payments to be received by any producer who delivers a portion of his milk to persons not fully regulated by the order.	Provision shall be made for reducing the allocation, or payment to be received by any producer who delivers a portion of his milk to persons not fully regulated by the order.	The "antidumping" provision in the Act of 1965 was a may provision; in the Act of 1970 it is a shall provision.
Producer Vote		
A Class I base plan shall not be effective in any marketing order unless separately approved by producers in a referendum in which each producer shall have one vote.		
Termination Of A Class I Base Plan		
A Class I base plan may be terminated whenever the Secretary makes and appropriate determination in accordance with the Agricultural Marketing Agreement Act of 1937, as amended, for the termination of orders. (The Secretary shall terminate a Class I base provision of an order when a majority of the producers favor such, provided that such majority produced more than 50 percent of the milk marketed during the representative period determined by the Secretary.)		

Food and Agriculture Act of 1965	Agricultural Act of 1970	Comments
	Producer - Handlers	
No provision defining the legal status of producer-handlers.	The legal status of producer-handlers under the provisions of the Agricultural Marketing Agreement Act of 1937, as amended, providing certain exemptions from the provisions of marketing orders, shall be applicable under an order with a Class I base plan.	
	Expiration of Legislation	
In 1968, the Act of 1965 was amended extending authorization for Class I base plans to December 31, 1970.	The provisions relating to Class I base plans shall not be effective after December 31, 1973 except that and marketing area with a Class I base plan issued prior to December 31, 1973, may have such order extended until December 31, 1976. Class I base plan provisions in the Act of 1965 may be extended to December 31, 1971, for any order previously issued by the Secretary.	

WHERE DO WE STAND IN COMPONENT PRICING OF MILK?

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As we view the component pricing question for milk, the initial question that might be asked is, "What are the components of milk?" Presently, the average composition of 100 pounds of producer milk in the U.S. is about as follows:

Water	87.61 lbs.
Butterfat	3.67
Protein	3.30
Ash (Calcium, etc.)	0.72
Lactose	4.70
	100.00 lbs.

In our fluid milk markets, at least, we are, in effect, on single component pricing, i.e., butterfat. For example, in the Eastern Ohio-Western Pennsylvania market this month, the Class I price of $6.91 per cwt. is associated with an 8.1 cent butterfat differential. Since the butterfat and skimmilk are costed separately to milk dealers, these values mean that 1 pound of butterfat used in Class I is priced at 85.075 cents and 1 pound of skim is priced at 4.075 cents. Note at this point that the skimmilk, by this system, is worth 4.075 cents per pound whether it tests 3.1 percent protein or 3.8 percent protein.

Similar procedures extend to the other price classes. For example, the current $4.77 Class III price and 7.8 cent butterfat differential leaves us with an 80.04 cent per pound value for butterfat and a 2.04 cent value per pound for skimmilk.

At this point, we are left with the general question as to whether this is the kind of pricing system for milk solids that we want. Why do we have this kind of system? A basic reason is that historically, the Babcock butterfat test was developed and other tests for milk solids were not available. The Babcock test was easy to operate, it was cheap, it was accurate. What are the reasons for continuing it -- or not continuing it? I guess one point of this discussion is to emphasize the reasons for not continuing the pricing only of butterfat.

As a preamble to a closer look at multiple component pricing, let us consider the following major changes in the milk industry.

1. The average butterfat test of producer milk in the U.S. in 1945 was a record high 3.98 percent. It has dropped steadily since then, and in 1970 the average BF test was 3.67 percent.

This drop of about 3 points in the fat test is equivalent to about 350 million pounds less butterfat, or 435 million pounds less butter, annually in our national milk supply.

Year	Mean BF Test
1945	3.98 pct.
1955	3.84
1965	3.70
1970	3.67

2. The average BF test of Class I milk in the U.S. dropped from 4.04 percent in 1952 to 3.72 percent in 1960 to 3.26 percent in 1970. It is intriguing to look at the changing composition of items among Class I sales. A comparison of 1958 and 1970 is as follows:

Year	Whole Milk	Low Fat-Skim	Cream Items
1958	90.2 pct.	6.7 pct.	2.1 pct.
1970	77.2	21.1	1.7

Low fat-skim items have about tripled as a proportion of Class I sales since 1958. About 63 percent of the low fat-skim sales are actually low fat milk.

3. The value relationship between BF and SNF, as determined by CCC purchase prices for butter and nonfat dry milk, has changed dramatically in recent years. The price of butterper pound was 4½ times that of powder in 1960, but is not much more than twice as high in 1971.

CCC Purchase Prices per Pound

Year	Butter	NFDM	Butter/NFDM Ratio
1960	60 cents	13.4 cents	4.48 to 1
1971	67.8	31.7	2.14 to 1

4. Per capita consumption figures provide us with another look at change in the milk market. Three slightly different series -- milk equivalent, butterfat, and solids not fat reflect the following changes over time:

	Per Capita Consumption		
	1960	1970	Pct. Change
Milk Equivalent	653 lbs.	557 lbs.	-15.2 pct.
Butterfat	24.5	20.7	-15.5
Solids Not Fat	43.4	41.1	- 5.3

The per capita declines in the milk equivalent series are not surprising, especially since dairy consumption is widely reported on the milk equivalent basis. However, the solids-not-fat decline does surprise some people. Note, though, that this drop in SNF is at only one-third the rate of the fat decrease. Further, there are no close substitutes to the SNF fraction of milk.

Let us change gears at this point and identify some reasons for promoting protein as a pricing component. Remember that different options can be pursued such as total solids pricing, solids-not-fat pricing, or dual component (fat-protein) pricing. But protein is at the focus of attention currently for the following reasons:

1. Protein is the glamour word in nutrition, and the milk industry wants to capitalize on it.

2. The feasibility, cost, and accuracy of protein testing are now such that protein pricing can be implemented operationally with full confidence. For example, there are two widely acknowledged protein dye-binding tests: The Ashworth Orange G method and the Udy Acid Orange 12 method, the latter one currently being used commercially in the Milwaukee milk market.

3. Finally, protein is the variable component in nonfat milk solids, and milk may therefore be rewarded or penalized according to its protein. Only butterfat and protein vary significantly in test, while lactose and ash are at relatively constant levels. The variability of fat and protein and the constancy of lactose and minerals among breeds have been reported by Stewart Johnson as follows:

Milk Composition

	Lactose and Minerals	Fat	Protein	Total Solids
Holstein	5.42 pct.	3.75 pct.	3.18 pct.	12.35 pct.
Guernsey	5.56	5.20	3.63	14.39
Ayrshire	5.51	4.09	3.42	13.02
Jersey	5.59	5.36	3.88	14.83

For decision purposes, it is helpful to evaluate how well BF differentials, as currently effected, reward protein or SNF variability. The widely recognized relationship is that, on the average, the SNF and protein tests of milk change directly with fat tests. As milk tests go up by 10 points in butterfat, the SNF test will go up by 4 points. Consider the following example:

100 pounds of milk:

3.5 lbs. BF + 8.50 lbs. SNF = 12.0 lbs. total solids

or

3.6 lbs. BF + 8.54 lbs. SNF = 12.14 lbs. total solids

In this example, the fat test has gone up 1 point and so, on the average, the SNF test has increased by 0.4 point. In fact, then, the BF differential does not reward just the additional 1 point in fat but rather the total increment of 0.14 pounds of total solids.

1/ Johnson, Stewart, "Protein Price Differentials For Milk," University of Connecticut Newsletter, February 1971, page 2.

But let us raise a couple of questions about this arrangement. First, is that "on the average" relationship a good enough system for valuing milk solids? Second, does the BF differential effectively and explicitly impart value to the SNF or protein? At this juncture, at least, let's say that the answer to both of these questions is no. And that is why we are seeing the growing interest in multiple component pricing.

Let us investigate these NO answers by talking about a lowering of BF differentials. After all, there is nothing magic about these 8 cent plus butterfat differentials we are currently seeing. Butterfat differentials are about 8 cents per point because, for fairly vague reasons, we equate the value of butterfat in fluid milk with the value of butterfat used in making butter. Since the value of butter is completely determined by the purchase price for butter in the price support program, our butterfat differentials are, in turn, wholly determined by the support program. Whether this procedure makes sense or not is a question we should raise.

But, the point is, butterfat differentials can be lowered. Either they don't have to be equated with butter values, or, thanks to the Agricultural Act of 1970, butter prices can be lowered. Now, any lowering of BF differentials will automatically transfer value to skimmilk (with its SNF-protein components). For example, in this market (Columbus), with its 84.9 cent butterfat and its 3.9 cent skimmilk, a reduction of the BF differential to 4 cents would reduce butterfat to 45.35 cents per pound and increase the value of skimmilk to 5.35 cents per pound. This would occur without changing the $6.75 Class I price.

In the short run, a lowering of BF differentials would be a relatively easy thing to implement. But is this really what the industry wants to do for the long run?

In the first place, the mere lowering of BF differentials would keep us with the BF identification.

In the second place, even though there is a positive average relationship between fat content and SNF/protein content, there is a substantial range in protein tests, not only among breeds but also within breeds. For example, for Holstein herds, (reported in S. Johnson's newsletter) at Milwaukee's Golden Guernsey Cooperative, the following differences were reported:

	Herd No. 1	Herd No. 3	39 Herds
Avg. Annual Protein Test	3.27 pct.	3.53 pct.	3.34 pct.

For 38 registered Guernsey herds, a range in SNF tests from 8.70 percent to 9.75 percent has recently been reported. 2/

2/ Starkenburg, Ron, "Multiple Component Pricing - Why Be Concerned," Proceedings of Western Dairy Conference Symposium, March 11-12, 1971, p. 11.

Under our present BF differential pricing, there is no explicit recognition of protein variation or SNF variation. This is a point that needs to be looked into further, but let me quote what Stewart Johnson has to say about this.

"There appears to be sufficient variation in the fat-protein relationship among dairy herds to justify use of protein testing and pricing programs. Given the variation in the fat protein relationship among herds, a protein testing and pricing program would alter the distribution of income among dairymen. Some would receive more and others less. This would encourage efforts among dairy farmers to increase the protein content of their milk through breeding and selection."

At this point let us dust off the definition of milk for the State of Ohio.

"Milk means the lacteal secretion obtained by milking cows or goats, and contains not more than 88.5% water, and not less than 11.5 percent solids or 3 percent milkfat."

There are 2 inter-related points that should be made about this.

1. As milk is received at a plant, the average protein test in one plant is going to be different from the average protein test in another plant. But you can't standardize protein by skimming like you can standardize for butterfat. Therefore, if protein differentials are substantial, a plant with a 3.7 protein test could go broke as compared to a plant with a 3.2 protein test. This would probably necessitate some kind of regulation calling for minimum SNF test on processed milk, through fortification if necessary.

2. Related to this point is whether consumers, in fact, will pay more for higher protein milk. We know that consumers have some basic reactions to this. Arizona research has provided the following information: 3/

a. People can differentiate between milk beverages with variations of ½ percent fat.

b. People can differentiate between milk beverages with variations of 1.0% SNF.

c. The addition of 1% SNF to whole milk, low fat milk, or skim milk caused a great increase in consumer acceptance of each of these.

But can these preferences actually be translated into price differentials that would offset the raw product cost to handlers. For example, in my own household today, we are buying 10 quart dispensers of low fat milk on home delivery for $2.74 per dispenser. For whole milk, we would be charged $2.94 for the same package.

3/ Hillman, J.S., et.al., Consumer Preference and Acceptance for Milk Varying in Fat and Solids Not Fat, University of Arizona, Tech. Bul. 153, November 1962, p. 4.

I have raised the question before regarding producer milk, "How can you assign market values to protein in fluid milk when limited differences in protein content completely elude the consuming public?"

At this point, let us consider the question of what our purpose would be in moving to multiple component pricing?

What would be the primary purpose in moving to protein or multiple component pricing? Most would agree that we want price to reflect the consuming public's demand for milk, including the components of milk, and to generate a supply of milk of appropriate milk solids composition to be adequate for society's needs. But what more specific purposes might be pursued?

1. To resolve an equity problem -- Given the variation in protein tests, this would be a reasonable objective.

2. To capitalize on nutrition concerns -- The valuable protein and mineral components of milk argue for this as a purpose.

3. To change the relative component tests of cow's milk -- The fact that milk solids can be put together at a plant any way you want them, together with the 50 to 100 year period to accomplish such major genetic changes argue against this as a purpose.

4. To increase the amount of money returned to dairy farmers for their milk -- This does not appear to be at the heart of the component pricing question. It is not how big the pool is but how it should be divided up that is of concern to the dairy industry so far as this question is concerned.

This points up another question in multiple component pricing. Is it only handlers who are charged for milk on a components basis? Or is it only producers who are paid on a components basis? Or do we proceed on both sides of the pool?

Today in the United States, there are two multiple component pricing plans in operation in fluid milk markets. The Milwaukee Golden Guernsey Dairy Cooperative is on a dual fat-protein differential. Milk is priced from a 3.5 fat base and a 3.2 protein base. In this past year, the cooperative has paid out $132,000 in protein differentials to 328 participating herds. Protein differentials have averaged about 3 cents per point, with no minuses for less than 3.2 percent protein. Source of money for the protein differentials primarily is a 3 cent per cwt. deduction from the pool. In this plan, handlers are not charged but producers are paid according to protein test.

The State of California operates a multiple component pricing plan which <u>both</u> pays producers and charges dealers according to component tests. For Class I, dealers are charged for fat, solids-not fat, and

fluid (water), while other classes are costed only in terms of fat and SNF. Producer prices are paid in terms of fat and SNF. Both California and Milwaukee Golden Guernsey have been in some form of component pricing since 1962.

Would the Federal order program be open to a multiple component pricing plan? The Dairy Division has affirmed the fact that if the case can be made in public hearing, the U.S.D.A. would support multiple component pricing. From the Federal order standpoint, such a plan has only been suggested once, and that was in promulgation of the Upper Florida Federal milk order. Ultimately, the dairymen promoting that effort did not pursue it and component pricing did not become a part of the regulation. However, the Dairy Division did evaluate the proposal and the types of questions that were raised are a matter of record. Substantive answers to the questions can be generated. On this basis, the light is green for component pricing.

In conclusion, let me suggest a half dozen considerations that we should keep in front of us in approaching the multiple component pricing question.

1. First, we need to better evaluate the strengths and weaknesses of our current milk pricing system.

2. We need to be more precise in specifying our objectives, on an industry-wide basis, in pricing milk solids.

3. We need to identify the alternatives available in multiple component pricing, and which plan is most equitable to all parties.

4. We need to know whether we want to implement component pricing in terms of costs to processors, or rewards to producers, or both.

5. We need to determine the optimum way of assigning values to specified components.

6. Finally, it isn't so much that more needs to be known about multiple component pricing, but more people need to understand what is known. Hopefully that's what this session has been all about.

PRODUCTION ISSUES IN COMPONENT PRICING

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Nutrition Responses

There is little that can be done to increase the butterfat, solids-not-fat, or protein percentage of milk by nutritional manipulation.

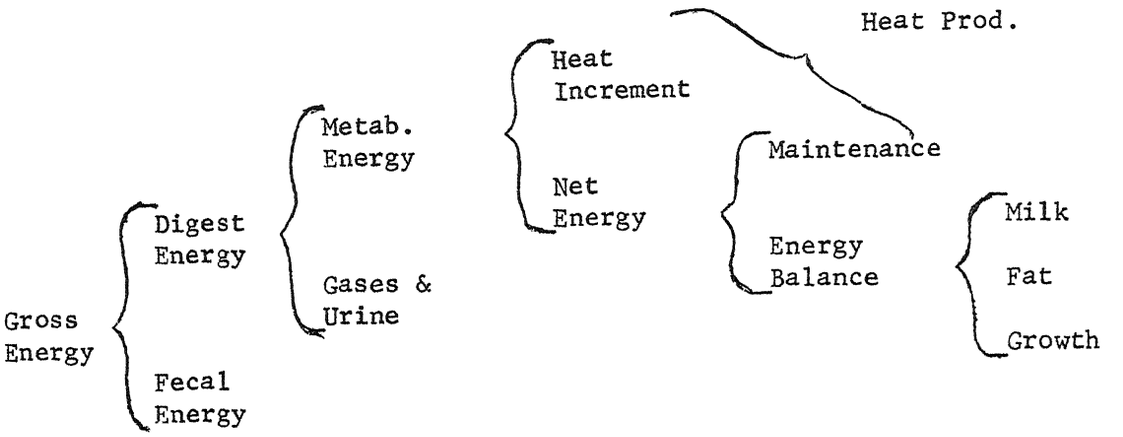
Feeding whole soybeans as the supplemental protein source in dairy concentrate mixtures may raise the butterfat percentage of milk by 0.1 to 0.3 percent. This increase is somewhat transitory and may last only one to three months. Unfortunately, feeding ground whole soybeans that contain considerable amounts of oil tends to lower the melting point of butterfat. This is no problem if the milk is used as fluid milk but could be a problem if it were churned into butter.

If feeding programs are changed to provide adequate amounts of protein and energy, it is possible to increase the protein and solids-not-fat percentages up to the genetic potential of the cattle. However, feeding either protein or energy in excess of the needs of the dairy cow will not increase the percentage of either milk protein or solids-not-fat.

There are numerous ways that butterfat percentage of Holstein milk can be reduced. Most of these procedures involve reducing the effective fiber level in the ration. This can be done by grinding or grinding and pelleting the roughage, feeding high levels of grain and low levels of roughage or feeding high levels of ground high-moisture shelled corn in the presence of limited amounts of roughage. Such procedures have reduced the butterfat percentage in Holstein milk to as low as 0.8%. It was originally assumed that the extra energy that was not put into the milk fat was stored as body fat in the cow. Recently, however, Dr. Tyrell of the Agricultural Research Service, U.S. Department of Agriculture has indicated that this is not true. His data indicate that the energy that is not put into milk fat in situations where the butterfat percentage has been depressed is dissipated as a part of the heat increment.

Table 1 shows the various components into which energy is partitioned by dairy cows. Gross energy indicates the amount of energy available from the total feed intake if the entire amount of feed were burned. Gross energy is then partitioned into fecal energy losses and the remainder is considered to be digestible energy. Digestible energy is further partitioned into gas and urine losses with the remainder of the energy remaining as metabolizable energy. Metabolizable energy is partitioned into heat increment which is the increase in heat production due to feeding and net energy balance. Energy balance is that portion of the feed that can be used to produce milk, fat and body growth. The heat

Table 1



increment and the heat of maintenance are added together to indicate the total heat production of the animal. This heat can be useful in cold weather to maintain normal body temperature. This extra heat production may become a serious problem to the dairy cow when the average environmental temperature exceeds 75°F. Therefore, the energy in butterfat depressed cows that goes to increased heat increment would add significantly to the problems of keeping cows producing at high levels during the summer time when the average environmental temperature often exceeds 75°F.

Possibilities For Changing Milk Composition Through Genetics

The possibilities for changing milk composition through genetic change depends upon four things: (1) the variation within the population; (2) the heritability of the characteristic desired; (3) the genetic correlation between various milk components; and (4) the selection differential that can be applied to the population. Since I am not a geneticist I have relied heavily upon an article entitled, "Factors Responsible For Variation In Milk Composition" by R. C. Laben as published on pages 1293 through 1301 in Volume 46 of the Journal of Dairy Science, 1963.

Table 2. Assumed Heritabilities, Standard Deviations, and Genetic Correlations of Milk Components

		Genetic Correlations			
Item	Herit.	Milk (lb.)	Fat (%)	SNF (%)	Std. Dev.
Milk (lb.)	0.25				2,000 lb.
Fat (%)	0.50	-0.20			0.35%
SNF (%)	0.50	-0.20	+0.50		0.25%
Prot. (%)	0.50	-0.20	+0.48	+0.94	0.20%

Table 2 provides some information concerning the genetic variation, heritability and genetic correlation of various milk components within the Holstein breed. The standard deviation is an indication of the variation within a population. Sixty-seven percent of the Holstein population would fall within plus or minus one standard deviation from the breed average. Milk production varies (plus or minus) $\pm$ 2,000 lbs. around a 13,000 average. Fat percentage varies $\pm$ 0.35 percent around a 3.7 percent breed average. Protein varies $\pm$ 0.2 percent around a 3.2 breed average. These figures indicate that within the Holstein breed there is more variation in milk production than there is in fat or protein percentage. However, between fat percentage and protein percentage there is more variation in the fat percentage. More rapid progress can be made when the variation is greater. Two standard deviations from breed average would include approximately 96% of the population and three standard deviations would contain about 99.8% of the population.

Heritability can be defined as that percentage of the superiority or inferiority of the parents that is passed on to the next generation. It must be recognized that each parent supplies one-half of the inheritance for the offspring and the superiority or the inferiority of both parents must be considered. The heritability for milk production is 0.25 or 25%. The heritabilities of fat percentage, solids-not-fat percentage and protein percentage are nearly twice as high, being 0.5 or 50%.

The genetic correlations indicate that some factors of milk composition vary together and others vary in the opposite direction. Selection for increased fat percentage would decrease milk output in pounds but increase the protein percentage. Selection for solids-not-fat percentage would decrease milk production, increase fat percentage and increase solids-not-fat percentage because it is the primary variable in solids-not-fat.

Table 3. Expected Changes In Correlated Items As Each Component Is Raised By Selection Using Assumptions of Table 1

Selected item and amount	Expected Correlated Changes			
	Milk (lb.)	Fat (%)	SNF (%)	Prot. (%)
Milk (+ 1,000 lb.)	----	-0.05	-0.04	-0.03
Fat (+ 0.35%)	-282	-----	+0.12	+0.10
SNF (+ 0.25%)	-282	+0.18	-----	+0.19
Prot.(+ 0.20%)	-282	+0.16	+0.24	-----

Table 3 indicates the amount of progress that can be made in changing milk output and milk composition, if a single characteristic were used as a selection criterion, the least desirable 20% of the cows in terms of that characteristic were culled and only the top 20% of the bulls rated on their ability to transmit the characteristic were used as sires.

Culling cows for reproductive difficulties, health problems and type characteristics would have to be done in addition to the 20% culled to change milk production or composition. The most rapid genetic progress in dairy cattle breeding can be made through selection of the sires because dairymen have the opportunity to choose the sire for each mating whereas they have a much reduced opportunity to pick the cows that will be the dams of the heifers. Theoretically the changes shown in Table 3 could be made in approximately 5 years if maximum selection pressure were exerted. Under practical conditions, it is more likely that these changes would take ten years.

Selection for an additional 1,000 lbs. of milk per cow per year would cause the butterfat percentage to drop 0.05%, solids-not-fat to drop 0.04% and protein percentage to drop 0.03%. Selecting for an increase of 0.35% in fat would cause a reduction of 282 lbs. of milk and an increase of 0.12% in solids-not-fat and an increase of 0.10% in protein. Selecting for an increase of 0.25% in solids-not-fat would lead to a decrease of 282 lbs. of milk and an increase of 0.18% in fat and 0.19% in protein. Selecting for an increase of 0.20% in protein would lead to a decrease of 282 lbs. of milk and an increase of 0.16 percent in fat and 0.24 percent in solids-not-fat.

Dairymen do a considerable amount of talking about the percentage of various components in milk, particularly butterfat percentage because they feel milk is priced on this basis. I would, however, suggest that milk is not priced on a percentage basis because it is priced on a percentage times 100 lbs. which then becomes lbs. of various components.

Table 4. Expected Changes After Selection, In Pounds Of Correlated Items and Dollar Value of Total Record. Expressed As Deviations From An Initial Record. Assumptions Of Tables 1 and 2, And Current Grade A Prices

		Change after selection for:			
Item (lb.)	Initial record	+1,000 Milk (lb.)	+0.35% Fat (lb.)	+0.25% SNF (lb.)	+0.20% Prot. (lb.)
Milk	14,000	+1,000	-282	-282	-282
Fat	504	+ 28	+ 38	+ 15	+ 13
SNF	1,176	+ 78	- 7	+ 11	+ 9
Prot.	434	+ 26	+ 5	+ 17	+ 19
$ Value		44.20	27.70		11.90
Milk liquid		$ 1.50/cwt.			
Milk fat		$ .80/lb. ($.08/point)			
Milk protein		$ .30/lb. ($.03/point)			

Table 4 indicates the effect of various types of selection on the lbs. of various milk components produced. If milk is priced at $1.50 per hundredweight of milk liquid, 8 cents per 1/10% of butterfat or 80 cents per lb. of butterfat and milk protein at 3 cents per 1/10 of a percent or 30 cents a lb., the following conclusions are reached. If the milk production of the Holstein breed were raised 1,000 lbs. from 13,000 to 14,000 this would provide an additional 1,000 lbs. of milk liquid, 28 additional lbs. of fat, 78 lbs. of additional solids-not-fat and 26 lbs. of additional protein. Using the assumed pricing system above, this would increase the value of the product $44.20. If selection were on butterfat percentage and this percentage were raised 0.35 percent, a decrease of 282 lbs. of milk would follow along with an increase of 38 pounds of fat, a loss of 7 lbs. of solids-not-fat and an increase of 5 lbs. of protein. Using the same economic factor this would lead to an increased value of the product of $27.70. If the selection pressure were applied to protein percentage raising this percentage 0.2%, it would lead to a decrease of 282 lbs. of milk, an increase of 15 lbs. of fat, an increase of 9 lbs. of solids-not-fat and an increase of 19 lbs of protein. Application of the economic factors would indicate an increase in the value of the product of $11.90 per cow. Therefore, the maximum increase in total lbs. of milk components produced and dollar value would follow selection for milk production only.

These tables would also indicate that it is more economically feasible to change milk composition by standardizing the products in processing than changing the product produced by cows.

LEGAL QUESTIONS - PROBLEMS ON THE MILK BARGAINING FRONT IN OHIO

Glen Wagner
Legal Counsel
Ohio Milk Producers Federation

I would like to couch my discussion this morning in terms of six cases. These cases came about because associations involved in establishing price above Federal order found some members not willing to have milk directed to other than the usual location. Great Lakes-Southern cooperatives bargained for higher than minimum prices in the fall of 1970. Broughton Foods at Marietta indicated they would not pay higher than the Class I premium price in Columbus, though normal zone differentials called for five cents more. Broughton probably felt he could secure milk outside of the membership supply area. Eventually the association ordered withholding and some members did not obey.

First Case:

Milk, Inc. brought suit in West Virginia. There was no written record of the case. Our attorney asked for a temporary injunction against producers not shipping through the cooperative. The judge said that under West Virginia law he would have to issue an order. He suggested that the milk go back on the truck. Producers complied so no violation occurred.

Second Case:

This case concerned our action against defecting members and the processor fieldman to require honoring of our membership agreement. Sixty (60) members were involved, and about one third (1/3) did not come back. Meantime, in an unrelated case, Scioto County (NFO - no relation to Broughton) dairy producers placed their supply with Broughton and breached contract with our Scioto association. The association obtained a temporary restraining order to maintain the status quo. This was against 12-16 people and all returned to the association truck. Both parties consented to the order. Some months later, defendant producers filed as plaintiffs in Pike County Court against the coop. This never went to trial as all cancelled at their release date. The association has now asked for dismissal

Third Case:

Central Ohio Milk Producers filed in Washington County against 15 members. The judge who held the hearing maintained that coop law in the Ohio code was improper since it negated the law of supply and demand. He apparently felt that coop law violated anti-trust laws. The judge granted a temporary injunction to ship through the cooperative, but only against those who remained as members. He stated that the requirement for member cancellation notification of the first 15 days of the 45 day period prior to contract anniversary was "unconscionable." He stated that if defendants wished to cancel, they would be out of the suit immediately. All did within several hours. The case is being appealed on the basis of

the judge's ruling. The law states a separate hearing is necessary if this basis is to be used for allowing cancellation. The association maintains the cancellation clause is not an issue in this case. The appeal is to be heard in the Court of Appeals on September 28.

Fourth Case:

Central Ohio Milk Producers brought action in Morgan and Monroe Counties. A temporary injunction was granted in Morgan County. All dissident producers could cancel at the regular date. In Monroe County a final order was granted. Producers had to go back on the truck until cancellation date. In Monroe County, the judge's opinion is that COMP is an agricultural cooperative and members' contracts are valid. The opinion states, "Plaintiff, in this case Central Ohio, is an agricultural cooperative, marketing milk and cream produced by its members under separate marketing contracts with each of them. Defendants, who are members, are refusing to turn over their milk to plaintiff, but are selling it on their own. The contracts with defendants contain this provision, 'In addition to other remedies provided by law, the association shall, in case of breach of this contract, be entitled to equitable release by injunction or otherwise.' Plaintiff is a non-profit corporation which returns all net earnings to its members in patronage dividends and certificates of equity. Defendant filed no pleading and offered no evidence. Plaintiff has no adequate remedy at law. Defendant, with some 1,500 other members, is engaged in a common effort in which the association, in their behalf, bargains with the dairy. The larger and more predictable the amount of milk to be offered, the better the prices which can be obtained. If members can withdraw at will, remaining members will be damaged but amount of damages would be impossible to ascertain. Since defendants are members of the plaintiff, they have a voice in its managing. Their contracts, in effect, are agreements with themselves and other members. The contracts are not unconscionable. There is no over reaching or surprise or oppression. Members have an opportunity each year to cancel their contract upon given notice. These occasions are not so infrequent and the notice procedure is not so onerous as to amount to oppression of the members. Plaintiff should be granted the injunction as prayed for."

Fifth Case:

Adams County group, presumably NFO, breached agreement with the Cincinnati Milk Sales Association. Instead of shipping direct, they were reloading at Sardinia (Equity Dairies). Under the Cincinnati Milk Sales contract, the Board of Directors could change normal cancellation date. The Adams County judge said this cancellation clause was unconscionable. The phrase has since been deleted in the CMSA contract.

So-called "yellow dog" contracts of handlers with non-members have been upheld. If a producer sued the association, I doubt that the Court would allow the association to get out of the contract, at least not let them get out of immediate obligations. It should be remembered that Courts, in the long run, usually tend to uphold contracts, and further, that producers always have a cancellation clause.

The Federal order definition of members shows some difference of opinion. The Market Administrator will honor producer membership on the basis of the contract, usually referring to "cooperative association of farmers." Other rulings have shown them reluctant to get into arguments on validity of contracts. In the fight between two coops, prior contract is usually held valid. But the latest interpretation in Cincinnati by the M.A. indicates rulings may be met, not on the basis of the contract, but "who is marketing or physically handling the milk." In one instance a group of farmers who breached a coop contract and physically delivered milk to another coop plant were judged to be a new membership group. Interpretation: Secretary of Agriculture did not decide on the basis of membership contract but the Courts can do so.

Sixth Case:

The Fairmont Co. filed action in Nebraska against "zoning" of prices. The Company challenged the concept of a high Class I price, according to distance from Minnesota / Wisconsin. They won their case in court. The decision did say that USDA could authorize compensatory payments. This may be an indication of a challenge to the hearing record, in opposition to differential payments.

Now let me generalize in terms of some other issues. The Agricultural Marketing Act of 1937 provides that if the majority of Federal Order producers apply to the Secretary, he shall terminate the order. Application to do so has been made in Houston.

Bargaining legislation is a long way from solving the problem of non-members. The question is, could the majority association be certified to represent all farmers. This will be difficult to get to a Congressional vote.

THE ADVERTISING-PROMOTION QUESTION FOR OHIO MILK PRODUCERS --FEDERAL ORDER DEDUCTIONS AS AN ANSWER

Paul E. Hand
Economist
Pennmarva Milk Marketing Cooperative

The gauntlet has been thrown down. Congress passed and President Nixon signed a new law (P.L. 91-670) in January 1971. This law provides for deductions from dairy farmers to be used for research, promotion and market development. Under this law the hearing procedure now applicable to federal milk marketing orders would be followed in the development of research and promotion provisions. The program is to be approved by the U.S. Secretary of Agriculture after the hearing. Following this approval it is to be submitted to a referendum of producers. A two-thirds majority of the vote for the new program is required for producer approval.

The order provisions covering market development would be approved apart from other order provisions. In this light, termination of this program would be separate from other Order provisions. While it requires two-thirds majority to approve the program, one-half of the producers, producing at least one-half of the milk can vote the program out.

Programs developed under this procedure would be administrated by an Agency of producers marketing milk under each order. Provisions must be made for any producer not in support of research and promotion programs, as provided in the order to obtain a refund on his share of the monies which were collected.

The first proposal for a hearing to consider a promotion and marketing development program under P.L. 91-670 was submitted by Pennmarva Dairymen's Cooperative Federation. Pennmarva is made up of three Cooperatives serving the Middle Atlantic Federal Order No. 4. These are Inter-State Milk Producers Cooperative, Maryland Cooperative Milk Producers and Maryland and Virginia Milk Producers Association.

Currently, approximately nine hundred thousand dollars is being spent on dairy promotion and advertising through the American Dairy Association of Atlantic. American of Atlantic covers the marketing area of Federal Order No. 4 plus other cities in Pennsylvania and West Virginia. Even though this is a large sum, due to changes in milk marketing and distribution methods and decline in per capita usage of milk, it is the decision of the Boards of Directors of the three cooperatives that additional money must be raised for market development by dairy producers.

The promotion of milk by dairy farmers has been carried out, in a large measure, on a voluntary basis. The greatest expenditures have been made by cooperatives in their support of the American Dairy Association and local and National Dairy Councils. Those who did not participate could cite numerous reasons for not spending the money in support of the American Dairy Association, Dairy Council or other

voluntary programs. Those who have supported milk promotion expenditures have expressed concern over the fact that many dairy farmers were "getting a free ride" by benefiting from the expenditures made.

There have been many efforts to obtain market-wide participation and even mandatory participation through State programs. However, there are very few areas in the country where state-wide programs are in effect. Ninteen states provide legislation for promotion programs but only six states have programs, two of these are in New England and three are the West Coast states.

It is very difficult to demonstrate the benefits of a state-wide program. Much of the milk marketed today moves directly into the channels of interstate commerce. The growth of the federal order milk marketing program is the result of the interstate nature of milk. For example, during 1970 over 65 of the estimated 110.3 billion pounds of national sales to plants or 59 percent was regulated under the federal milk marketing order program.

The volumes and proportions of milk marketed under the federal order program have steadily increased. For example, in 1950, 18.7 billion pounds or 25 percent of the nation's milk marketings was regulated under federal orders and in 1960, 44.8 billion pounds or 43 percent was marketed under federal orders. This growth in federal orders and the decline in the influence of state laws regulating milk have made it difficult for producers to see the need for or the value of state promotion programs. This is the main reason for the effort to obtain programs for market development under federal orders. Previous attempts to obtain maximum producer participation in advertising programs have been tried by the positive letter approach, by the voluntary approach and passage of state legislation. These efforts have not obtained the amount of money which advertising personnel believe is necessary to successfully merchandise milk.

This new law has incorporated the method of voting to obtain positive results. At the same time the law allows the dissident producer who does not support market development to obtain a refund. It is expected that provisions of this law will be used widely. Only time will tell if this program will result in the maximum participation by dairy farmers.

The case for advertising dairy products has been presented many times and in many ways, by the American Dairy Association and by individual dairy leaders. Some of the points made by them follow: First, the change from home delivery system to store sales has placed milk in a more competitive position than in the past. The average consumer today, when purchasing milk, is faced with a barrage of competing products and must make a choice. Those industries competing with milk for sales space are promoting their products in a number of ways. The dairy industry must keep pace.

Second, the image of milk and dairy products has changed from that of being a necessity to an item which can be replaced in the diet. This fact the dairy industry cannot ignore. In order to restore milk and dairy products to their previous role, a substantial educational and promotional program must be sustained.

Third, a coordinated program in a marketing area will tie together the principal aspect of promotion and market development. This includes research, health education, food publicity, public relations, advertising and merchandising. Competing products have a coordinated and often single purposed advertising compaign. By this method they can pin-point seasonal aspects and nutritional aspects to increase sales. Milk and dairy products should be promoted in the same manner.

Fourth, the dairy industry no longer can afford to argue over such issues as voluntary versus mandatory programs, non-cooperative producers versus cooperative members or any of the other divisive dichotomies which crop up in everyday conversations. The time has come to analyze those programs which can be measured and which will be designed by dairymen for dairymen to increase sales and dollar returns to the dairy industry. Following this analysis, positive steps must be taken.

Fifth, other areas of the country are stepping up advertising programs and supporting increased expenditures to American Dairy Association and National Dairy Council. In order to obtain the full benefits of nation-wide programming and effort, it is necessary that greater participation be forthcoming from the Eastern seaboard.

Pennvarva Dairymen's Cooperative Federation worked with the National Milk Producers Federation in developing this proposal. The specific proposals submitted by the Pennmarva Dairymen's Cooperative Federation for a hearing in Federal Order No. 4 recommend the following:

(a) The selection of a producer agency to administer the program. Each five percent of the Producers (Cooperatives and Non-Cooperative Producers would be separate) have one representative on the agency.

(b) A rate of payment of 5¢ per hundred weight would be collected.

(c) A refund to a producer who did not support market development if the request is submitted in the first 15 days of the month proceeding the calendar quarter of the year.

(d) A maximum of 5 percent of the money to be used for administration.

(e) Authorized expenditures for American Dairy Association and Dairy Council activities.

(f) Locally devised programs.

(g) Other administrative provisions consistent with the law.

There will be a substantial amount of producer interest this year, because many areas will request hearings. Dairy farmers should inform themselves of the issues at hand.

One of the values of the federal order program is that dairy farmers will be able to have accurate reports on the amount spent and the effective-

ness of the program. Time will tell of the effectiveness of the advertising expenditures under the Federal Order program.

In summary, the dairy industry has been given a new tool to use in market development and promotion. It can be used as part of the federal order program, which regulates over 65 percent of the milk sold commercially The first hearing for such a program was requested by Pennmarva, representing dairy farmers in Pennsylvania, Maryland, Virginia, New Jersey, and Delaware. It is predicted that many other producers will request hearings to consider market development programs for milk under federal orders.

I am attaching a copy of the hearing notice for our proposal to indicate to you the specific dimensions of this program as we perceive it.

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE

7 CFR PART 1004

Docket No. AO-160-A47

MILK IN THE MIDDLE ATLANTIC MARKETING AREA

NOTICE OF HEARING ON PROPOSED AMENDMENTS TO TENTATIVE MARKETING AGREEMENT AND ORDER

Notice is hereby given of a public hearing to be held in the Caesar's Forum, Holiday Inn "Downtown", Howard and Lombard Streets, Baltimore, Maryland, beginning at 10:00 a.m. on September 21, 1971, with respect to proposed amendments to the tentative marketing agreement and to the order, regulating the handling of milk in the Middle Atlantic marketing area.

The hearing is called pursuant to the provisions of the Agricultural Marketing Agreement Act of 1937, as amended 7 U.S.C. 601 et seq. , and the applicable rules of practice and procedure governing the formulation of marketing agreements and marketing orders 7 CFR Part 900

The purpose of the hearing is to receive evidence with respect to the economic and marketing conditions which relate to the proposed amendments, hereinafter set forth, and any appropriate modifications thereof, to the tentative marketing agreement and to the order.

The proposed amendments, set forth below, have not received the approval of the Secretary of Agriculture.

Proposed by Pennmarva Dairymen's Cooperative Federation, Inc.:

Proposal No. 1. Provide for an advertising and promotion program for milk products under the order. The following amendments are proposed as a means of achieving this objective:

1. In § 1004.22, Additional duties of the market administrator, add the following three paragraphs:

g Make payments to producers who demand a refund of funds deducted pursuant to Sec. 1004.71(c);

h Conduct a referendum pursuant to Sec. 1004.103; and

i Audit the activities of the Agency as authorized under Sec. 1004.101.

2. In § 1004.71, add a new paragraph c , as follows:

c Subtract five (5) cents per hundredweight to be transferred to the Agency organized pursuant to Sec. 1004.101. Such funds are to be used for: (1) establishing or providing for the establishment of research and development projects, and advertising excluding brand advertising , sales promotion, educational, and other programs, designed to improve and

promote the domestic marketing and consumption of milk and its products; (2) establishing a reserve to refund producers pursuant to Sec. 1004.107; and (3) compensating the Market Administrator for auditing pursuant to Sec. 1004.22(i).

3. In § 1004.84 Producer-settlement fund, immediately following the reference "§ 1004.62", add the reference "§ 1004.71(c)".

4. In § 1004.86, add a new paragraph as follows: "The Market Administrator shall pay to the Agency such funds collected pursuant to Sec. 1004.71(c)."

5. The following proposed amendments 5A, 5B, etc., concern the addition of new Sections 1004.101 through 1004.116 to the order:

A. Sec. 1004.101 - AGENCY.

Agency means an organization of producers or producers' representatives approved by the Secretary and authorized to expend funds deducted pursuant to Sec. 1004.71(c) for the purposes of establishing or providing for the establishment of research and development projects and advertising excluding brand advertising , sales promotion, educational and other programs, approved by the Secretary designed to improve or promote the domestic marketing and consumption of milk and its products.

B. Sec. 1004.102 - COMPOSITION OF THE AGENCY.

The Agency shall be composed as follows:

a Each cooperative association or combination of cooperative associations will be authorized one representative for each full five (5) percent of the total number of producers in this Order which such cooperative represents; provided that after the program has been in effect one year, the number of representatives shall be based on the number of producers who have not requested refunds.

b Cooperatives with less than five (5) percent of the total number of producers in this Order who have not elected to combine and producers who are not members of cooperatives shall be authorized one representative of each full five (5) percent of the total number of producers.

C. Sec. 1004.103 - SELECTION OF MEMBERS TO THE AGENCY.

Each cooperative authorized one or more representatives to the Agency shall notify the Market Administrator of the name and address of each representative who shall serve at the pleasure of the cooperative. Cooperatives with less than five (5) percent of the producers in the Order may combine their producer membership; and if such combined total exceeds five (5) percent they shall be eligible to select a representative to the Agency. Cooperatives with less than five (5) percent of the producers in the Order and producers not members of cooperative associations shall be divided by the Market Administrator into geographic areas containing five (5) percent of the total number of producers in the Order. The Market Administrator shall conduct a referendum to determine the representative from each such area to the Agency. After the program has

been in effect for one year, the areas shall be adjusted to include only producers who have not requested a refund. Each person selected to serve on the Agency shall qualify by filing a written acceptance with the Market Administrator promptly after being notified of such selection.

D. Sec. 1004.104 - TERM OF OFFICE.

The term of office for persons serving on the Agency shall be one year or until a replacement is elected or designated by the cooperative.

E. Sec. 1004.105 - PROCEDURE.

A majority of the Agency members shall constitute a quorum and any action of the Agency shall require a majority of concurring votes of those present and voting.

F. Sec. 1004.106 - COMPENSATION AND REIMBURSEMENT.

Members of the Agency shall serve without compensation but shall be reimbursed for reasonable expenses incurred by them in the performance of duties as members of the Agency.

G. Sec. 1004.107 - POWERS OF THE AGENCY.

a To administer the terms and provisions of programs pursuant to Sec. 1004.101;

b To make rules and regulations to effectuate the purposes of Public Law 91-670;

c To recommend amendments to the Secretary.

H. Sec. 1004.108 - DUTIES.

The Agency shall perform all duties necessary to carry out the terms and provisions of this program including but not limiting to those specified in this section;

a To meet and organize and to select from among its members a chairman and such other officers as may be necessary; to select committees; and to adopt and make public such rules for the conduct of its business;

b To employ and fix the compensation of any person deemed necessary to accomplish the exercise of powers and performance of duties;

c To establish the rate of reimbursement to the members of the Agency for expenses in attending meetings;

d To require all persons handling Agency funds to be bonded in an amount and with surety thereon satisfactory to the Secretary;

e To publish a budget which shall show the projected amounts to be collected and disbursed by the Agency prior to each quarterly period and to submit such budget to the Secretary, if required.

f To make payments from the monies collected by the Order for:

(i) Paying the expense of administering the Agency;

(ii) Determining which organizations should be utilized, the amount of money which each such organization should receive for carrying out research and development projects, advertising excluding brand advertising , sales promotion, educational and other programs designed to improve or promote the domestic marketing and consumption of milk and its products and making payment to such organizations for these purposes; and

(iii) Publishing annually an accounting of such funds collected and a statement of the use made of such funds.

g To keep minutes, books and records and to submit books and records for examination by the Secretary and furnish any information and reports requested by the Secretary;

h To prepare and make available for the benefit of producers, handlers, and consumers, statistics and information concerning the operation of programs; and

i When desirable, to establish advisory committees of persons other than Agency members.

I. Sec. 1004.109 - PROCEDURE FOR REQUESTING REFUNDS.

A producer who is not in favor of supporting a research and promotion program, as provided for herein, shall have the right to receive a refund of such assessment by writing to the Market Administrator in the following manner:

a The request should be submitted on a form provided by the Market Administrator.

b The request should be submitted within the first fifteen days of December, March, June or September for milk which will be marketed during the ensuing calendar quarter beginning on the first day of January, April, July and October, respectively.

c The request should be properly notarized.

J. Sec. 1004.110 - RESEARCH AND PROMOTION.

The Agency shall develop and submit to the Secretary for approval any programs or projects authorized in this section. Such programs or projects shall provide for:

a The establishment, issuance, effectuation and administration of appropriate programs or projects for the advertising and promotion of milk and milk products on a non-brand basis;

b The utilization of the services of the American Dairy Association, local Dairy Councils and the National Dairy Council for programs and projects where such activities benefit Order 4 producers; and

c The establishment, support and conduct of research and development projects and studies to the end that the marketing and utilization of milk may be encouraged, expanded, improved or made more efficient. The benefits of such programs should be available equally to all Order 4 producers.

K. Sec. 1004.111 - INFLUENCING GOVERNMENTAL ACTION.

No funds collected by the Agency under this Part shall in any manner be used for political activity or for the purpose of influencing governmental policy or action except in recommending to the Secretary amendments to this Part.

L. Sec. 1004.112 - LIMITATION OF EXPENDITURE BY THE AGENCY.

No more than five (5) percent of the money deducted from producer funds or advertising projects should be utilized by the Agency for administration of the Agency.

M. Sec. 1004.113 - CONFIDENTIAL TREATMENT.

All information obtained from such books, records, or reports shall be kept confidential by all officers and employees of the Department of Agriculture and of the Agency, and by all contractors and Agents retained by the Agency, and only such information so furnished or acquired as the Secretary deems relevant shall be disclosed by them, and then only in a suit or an administrative hearing brought at the direction, or upon the request, of the Secretary, or to which he or any officer of the United States is a party, and involving this program. Nothing in this section shall be deemed to prohibit (1) the issuance of general statements based upon the reports of a number of producers subject to this program, which statements do not identify the information furnished by any person, or (2) the publication by direction of the Secretary, of the name of any person violating this program, together with a statement of the particular provisions of this program violated by such persons.

N. Sec. 1004.114 - PERSONAL LIABILITY.

No member of the Agency shall be held personally responsible, either individually or jointly with others, in any way whatsoever to any person for errors in judgment, mistakes, or other acts, either of commission or omission, as such member except for acts of willful misconduct, gross negligence or those which are criminal in nature.

O. Sec. 1004.115 - LIQUIDATION.

In the event that the provisions of this program are terminated, any remaining funds shall revert to the producer settlement fund of Sec. 1004.84.

P. Sec. 1004.116 - SEPARABILITY OF PROVISIONS.

If any provisions of this program or its application to any person or circumstance is held invalid, the application of the provision and all the remaining provisions of this program due other persons or circumstances shall not be affected thereby.

Proposed by the Dairy Division, Consumer and Marketing Service:

Proposal No. 2

Make such changes as may be necessary to make the entire marketing agreement and the order conform with any amendments thereto that may result from this hearing.

Copies of this notice of hearing and the order may be procured from the Market Administrator, 710 South Washington Street, Alexandria, Virginia, 22314 or from the Hearing Clerk, Room 112-A, Administration Building, United States Department of Agriculture, Washington, D.C. 20250 or may be there inspected.

Signed at Washington, D.C., on: August 27, 1971

/s/ JOHN C. BLUM
Deputy Administrator
Regulatory Programs

THE ADVERTISING-PROMOTION QUESTION FOR OHIO MILK PRODUCERS
UDIA AS AN ANSWER

Richard Kathe
Executive Vice-President
United Dairy Industry Association

In describing to you the United Dairy Industry Association, permit me to start by offering a brief historical perspective.

NDC organized and grew steadily in the 1920's, primarily for school nutrition purposes. During and after World War II, the educational effort was expanded, as well as news and radio type of promotion.

ADA began in 1940-41 with two purposes - 1) education and research, and 2) advertising and promotion. In 1969 DR Inc.formed to develop and market new dairy products. The first concept was to build a laboratory and begin research. The final decision was to work with commercial companies who would be selling the products. Market research is done under contract with private companies. These companies will be putting up 4-5 times as much as DR Inc.and thus we will be sure that research efforts can be transferred into market potentials.

The main idea of UDIA is to put all of these back together in one organization. In 1968, ADA and NDC cooperated in a $96,000 study which determined that all of these organizations were underfunded and needed more coordination.

UDIA came into being to provide adequate funding at national and local levels and eliminate competition for fund raising between ADA and NDC. Thirty million dollars per year was being raised for dairy promotion efforts, with 90 percent of it coming from the farmer and his dairy organizations.

We see two benefits to consolidation: (1) UDIA will do the solicitation, (2) UDIA will do coordination of program activity.

In the summer of 1970, bylaws and membership agreements were drawn up. The first activity was to take the story to 12 regional ADA meetings. The Great Lakes-Southern meeting included Ohio representatives. This first effort was not successful. Second effort included individual conferences to determine what the criticisms were, and we came up with the following: 1) programs are not tied to a national marketing effort, 2) the manner of director elections was not on the basis of funding; some organizations were providing directors but were not providing funds, and 3) we would only be adding another organization, which could not be coordinated.

The concept of UDIA developed in March of 1971 at the ADA annual meeting. The ten organizations represented held a series of closed door meetings and developed a policy statement for UDIA -- approved April 7.

At this point, Mr. Kathe presented materials and slides reflecting the following information (two of the information prices, "Principles of Operation" and "Statement of Objectives" are attached to this presentation). 1) Milk consumption has declined to 567 lbs. per capita in 1969. It is projected by 1980 to be 432 lbs. 2) The per capita decline is increasing rapidly. The 20 year trend shows 1% for the first 5 years, 1.7% for the last 10 years, 2½% decline in per capita consumption for the last 5 years. Some dairy products are up in sales. These include low fat milk, cheese, ice cream, cottage cheese. However, milk and butter, main dairy items, are down. The ADA special promotion run in some Federal order markets showed, in 1962, a 5% increase in consumption from the investment of 2¢ per cwt. in promotion. By 1968 consumption was up 7 to 8%. In 1968, a doubling of the amount of promotion to 4¢ per cwt. caused an increase of 12% in consumption.

Projection indicates a 15% decline in dairy products consumption in the next 10 years. Soft drinks such as pop will increase 13%. The total dairy loss will amount to 4%. A continued cost-price squeeze is projected. Revenue will be down 5%, profit down 14% in the next 10 years. If all trends continued, 400 thousand dairy farmers in 1969 will decline to 172 thousand by 1980. Smaller farmers will be hurt the most, i.e., those with less than 30 cows. The decline will come from diet trends, changing life styles, lower calorie intake and analog foods. One example: 30 million dollars was spent promoting oleo in 1967, while 300 thousand dollars was spent by ADA for butter promotions. Stronger effort is needed in sales promotion, research, and nutrition education. To increase the net income, a better tie-in is needed between promotion and marketing programs. It is proven that promotion will sell milk. Strong points on the present program show: 1) ADA - has a new ad agency and a new promotion department. 2) NDC - a new president. 3) DR Inc. - a new research arm with new ideas but still has limited funds. Milk promotion is still a state by state market activity of ADA. Updating is needed to secure 1) strong coordinated milk promotion effort, 2) secure necessary funds for this effort, and 3) tie promotion closer to market and provide unification.

Currently the organization of UDIA has 97 directors. Unified budgets so far call for 24-million dollars. Some cooperatives are not in. Each funding agency is responsible for $100-thousand in order to have a director and $250-thousand for each additional director.

ADA, NDC, and DR Inc. will propose 1972 programs and budgets to UDIA for authorization. UDIA will supply all funds to ADA and DR Inc., plus all producer funds to NDC in 1972. UDIA collects dollars from member organizations, and in turn distributes this to NDC, ADA and DR Inc.

STATEMENT OF OBJECTIVES

United Dairy Industry Association
June 12, 1971

Consistent with the aims and purposes of each of its members, United Dairy Industry Association will conduct its affairs with the primary objective of improving the incomes of dairy farmers.

UDIA recognizes --

- -- that the potential for increasing returns to selected groups of dairy farmers is extremely limited;
- -- that extensive inter-city and inter-regional movement of milk has unified all dairy farmers into a new singleness of interest; and
- -- that in order to merit the needed support and participation of all dairy farmers, UDIA programs must be directed to improving the utilization of the total domestic supply of milk.

UDIA will, as a matter of routine procedure, call upon the advice and counsel of such marketing specialists of its member associations as such member association shall from time to time designate.

While diligently striving for more productive programs of nutritional education, of influencing consumer food choices, and of new products and market research, UDIA will also maintain cognizance of the endeavors of other organizations toward --

- -- maximizing export opportunities;
- -- minimizing import damage to the domestic dairy industry; and
- -- a legislative exchange and judicial climate favorable to a dynamic domestic dairy industry so as to assure the effectiveness of UDIA programs in providing a return on the investment of its members.

UDIA will be operated with full recognition that its functions are designed to enhance consumer demand for milk and dairy products or part of a total market program for dairy farmers, and that such activities must be coordinated with all other cooperative marketing activities in such a way as to maintain most effective "total market" performance on behalf of dairy farmers.

UDIA will answer the most frequent objections to farmer sales programs. UDIA will provide for representative control by farmers, proportionate to their funding, it will provide for operational flexibility to concentrate funds and management upon the most immediate factors limiting returns to dairy farmers, providing for such decision making upon the recommendation of members, marketing associations, and giving full consideration to the total market situation as viewed with the objective of maximizing income to dairy farmers.

PRINCIPLES OF OPERATION

United Dairy Industry Association
June 12, 1971

1. Objective

To unify the milk promotion efforts of the nation into one coordinated program that has total financial accountability, and is tied closely with marketing, with the proper emphasis, according to available dollars, on sales promotion, nutrition education and research on a nationwide, regional and local basis to give the dairyman the greatest market building effort for his investment.

2. Organization

UDIA shall be the central organization of the nation's milk promotion efforts, determining organizations and program needs and objectives, establishing operating policies of UDIA, securing finances and providing the necessary coordination of the organizations involved in the nation's milk promotion programs to secure an effective, efficient unified program.

3. Program Direction

The promotion programs of milk and milk products shall be directed to consumers in relation to the marketing practices of the particular product whether it be national, regional or an individual marketing area, in a manner that will assure the most effective results with the greatest return to dairymen, especially those financing the program.

The overall program objectives and emphasis shall be determined by UDIA, including the projected allocation of funds for sales promotion, nutrition education and research, which are to be incorporated in the annual unified budget. In addition, the budget allocation and program emphasis for various milk products shall be determined by UDIA according to the above statement and reflected in the annual unified budget.

4. Program Implementation

Only the promotion programs approved by UDIA shall be implemented by UDIA member organizations or organizations which UDIA provides funds. Programs are to be implemented in such a manner that it will only be one program effort which shall be coordinated. Programs shall be implemented and serviced in part or total by the member organization or by the organization which UDIA is providing funds depending on which is the most feasible and according to needs and desires of the particular area. However, there must be overall coordination in carrying out the program. The cost of program services and implementation shall be part of the unified budget for the particular area.